

Title (en)

ARRAY SUBSTRATE, LIQUID CRYSTAL DISPLAY PANEL, DISPLAY DEVICE

Title (de)

ARRAYSUBSTRAT, FLÜSSIGKRISTALLANZEIGETAFEL, ANZEIGEVORRICHTUNG

Title (fr)

SUBSTRAT DE RÉSEAU, PANNEAU D’AFFICHAGE À CRISTAUX LIQUIDES, DISPOSITIF D’AFFICHAGE

Publication

EP 3537210 A1 20190911 (EN)

Application

EP 17829905 A 20170630

Priority

- CN 201610935519 A 20161101
- CN 2017091040 W 20170630

Abstract (en)

An array substrate is described, which has a display area and a non-display area in the periphery of the display area, and comprises: a plurality of gate lines to which gate pulse signals are provided; a plurality of data lines to which data signals are provided, wherein signals on adjacent ones of said plurality of data lines have opposite polarities; a charge sharing device comprising a first thin film transistor in the non-display area, a first terminal of said first thin film transistor being connected to one of two adjacent data lines among said plurality of data lines, a second terminal thereof being connected the other of the two adjacent data lines, and a gate thereof being configured to be provided with a first control signal in a blank time period between adjacent data frames so as to turn on said first thin film transistor. In this way, charge sharing during polarity reversal of the data lines can be realized by a cheap and simple structure, thus saving electrical power consumption.

IPC 8 full level

G02F 1/1362 (2006.01); **G02F 1/1368** (2006.01); **G09G 3/36** (2006.01)

CPC (source: CN EP US)

G02F 1/1362 (2013.01 - EP); **G02F 1/136286** (2013.01 - CN); **G02F 1/1368** (2013.01 - CN EP); **G09G 3/3233** (2013.01 - EP); **G09G 3/36** (2013.01 - EP); **G09G 3/3614** (2013.01 - EP US); **G09G 3/3688** (2013.01 - US); **G09G 2310/0248** (2013.01 - EP); **G09G 2330/021** (2013.01 - US); **G09G 2330/023** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3537210 A1 20190911; **EP 3537210 A4 20200701**; CN 108020967 A 20180511; CN 108020967 B 20210126; US 10777161 B2 20200915; US 2020082779 A1 20200312; WO 2018082326 A1 20180511

DOCDB simple family (application)

EP 17829905 A 20170630; CN 201610935519 A 20161101; CN 2017091040 W 20170630; US 201715747672 A 20170630